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MIMOSA WILT

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The mimosa tree, Albizia julibrissin Durazz., is a native of Asia and is widely grown as an ornamental in the southern part of the United States. It grows rapidly and has fern-like leaves and showy flowers (3). Of the approximately 50 species of Albizia (1), A. julibrissin Durazz. and A. Lebbeck Benth. are the most common in Florida.

Mimosa wilt was first observed approximately 40 years ago in North Carolina and has since been reported in many areas of the southeast (3, 4), including Florida (6). Mimosa wilt is caused by Fusarium oxysporum f. perniciosum (Hept.) Toole. It is a vascular-invading fungus which overwinters in the soil after building up on the roots of susceptible hosts. When the fungus comes into contact with a mimosa tree or any susceptible plant, the infection cycle begins anew (4). Gill (2) has noted that root-knot nematodes tend to increase the incidence of mimosa wilt.

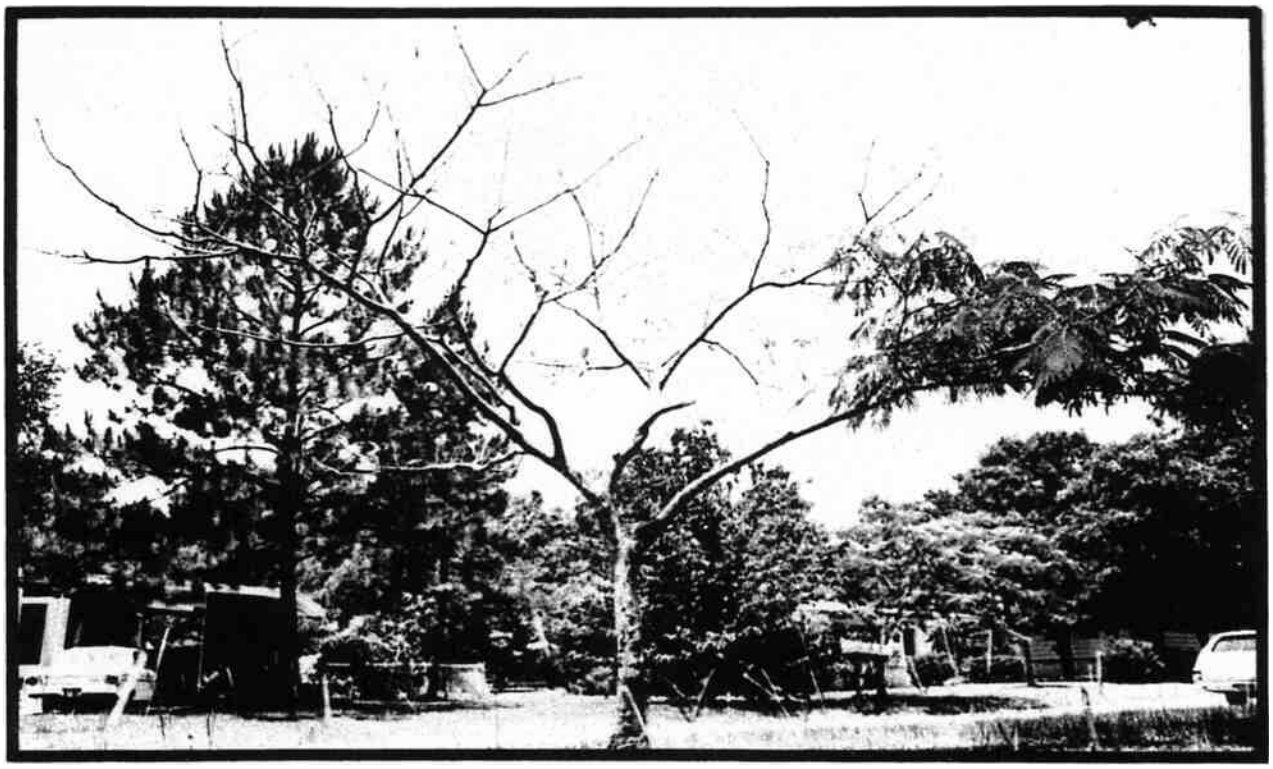

Fig. 1. Mimosa wilt showing wilting leaves and defoliation.

SYMPTOMS. The first symptom of mimosa wilt is a drooping of the leaves which is usually first seen on a single branch. The wilted leaves become yellow and dry, and fall (Fig. 1). Affected stems exhibit a brown discoloration of the sapwood (3), splitting of the bark with dark streaks of exudate (6), and at times, gummosis (Fig. 2). Following increasing defoliation the tree usually dies within one year after the first observation of wilt symptoms.

CONTROL. Specific disease control measures are wanting; however, certain general practices directed toward minimizing the incidence of this disease are suggested as preventive measures. The movement of soil from infected areas should be discouraged. Pruning and other type wounds should be dressed immediately with asphaltum or coal tar. Any tools used on trees should be disinfested with an effective disinfestant such as Clorox, alcohol, etc. (3). Areas infested with root-knot nematodes should be avoided or treated before planting mimosa trees. Obviously, plants which are suspected of being infected should not be transplanted into areas having no record of the disease. The use of wilt-resistant varieties such as "Tryon" and "Charlotte" may prove to be of significant value in reducing the losses due to this disease (5).

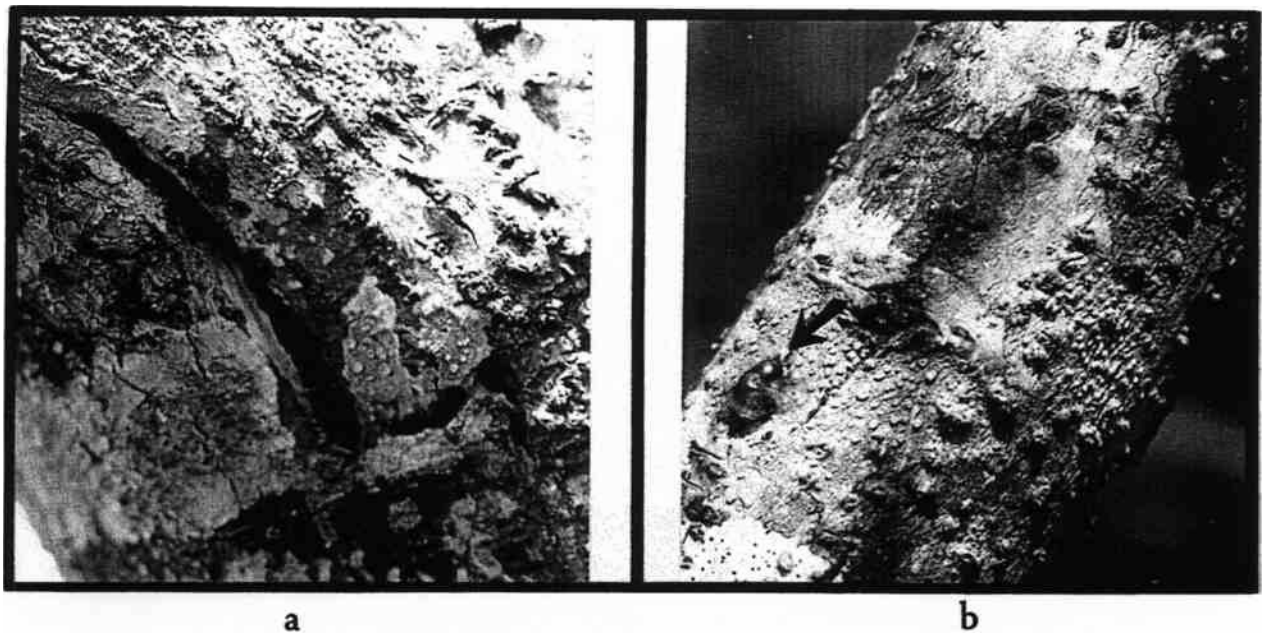

Fig. 2. Mimosa wilt: a) bark splitting; b) gummosis.

Literature Cited

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5. Toole, E. R. 1955. Performance of wilt-resistant mimosa trees in high-hazard areas. Plant Disease Reptr. 39:874.
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